



2016 Massachusetts HIV/AIDS Epidemiologic Profile Adolescents and Young Adults

Fast Facts

- 15% (N=294/2,027) of all recent HIV diagnoses (2012–2014) were among adolescents and young adults (aged 13–24 years).
- This proportion is below the national average (22%).
- 79% (N=184/232) of adolescent and young adult menⁱ recently diagnosed with HIV infection reported male-to-male sex.

Introduction

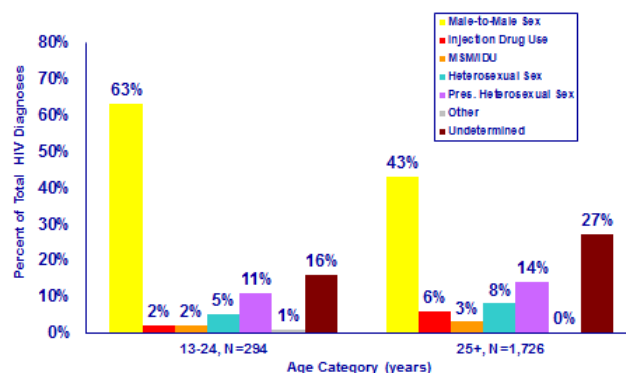
In 2014,ⁱⁱ the proportion of adolescents and young adults (aged 13–24 years) diagnosed and reported with HIV infection in Massachusetts increased to 15% (N=96/629) from 8% (N=69/913) in 2005. Nationally, the proportion of adolescents and young adults diagnosed and reported with HIV infection was 22%.ⁱⁱⁱ While the overall number of HIV diagnoses in Massachusetts declined by 31%, the number of adolescents and young adults diagnosed with HIV infection increased by 39% from 2005 (N=69) to 2014 (N=96).

Compared to adults aged 25 years and older diagnosed with HIV infection, adolescents and young adults differ with respect to exposure mode and sex at birth. Male-to-male sex accounted for a greater proportion of recent diagnoses (2012–2014) among male adolescents and young adults (79%, N=184/232) than among men 25 years old and older (58%, N=736/1,274). Among persons recently diagnosed with HIV infection, the proportion of women among adolescents and young adults was lower than the proportion among persons aged 25 years and older (21%; N=62/294 and 26%; N=452/1,296, respectively).

Exposure Mode:

- Male-to-male sex accounted for 63% of recent HIV infection diagnoses among youth aged 13–24 years (Figure 1).
- A smaller percentage of youth diagnosed with HIV infection at age 13–24 years were reported with missing exposure mode information (16%), compared to individuals diagnosed at age 25 years and older (27%).

Figure 1. Percentage Distribution of People Diagnosed with HIV Infection by Age at HIV Diagnosis and Exposure Mode: Massachusetts, 2012–2014



Data Source: MDPH HIV/AIDS Surveillance Program. Data are current as of 3/1/16 and may be subject to change (percentages may not add up to 100% due to rounding).

- Forty-five percent (N=168/374) of people 13–24 years old living with HIV infection on December 31, 2015 were born to HIV-infected mothers and were exposed at or around birth.
- Of the 168 individuals living with HIV infection who were 13–24 years old on December 31, 2015 and infected at birth:
 - Fifty-five percent were young men and 45% were young women.
 - Forty-five percent were black (non-Hispanic), 30% were Hispanic/Latino, 21% were white (non-Hispanic), and 3% were of other race/ethnicities.^{iv}

For detailed data tables and technical notes see Appendix

Bureau of Infectious Disease and Laboratory Sciences

The Massachusetts Public Health State Laboratory

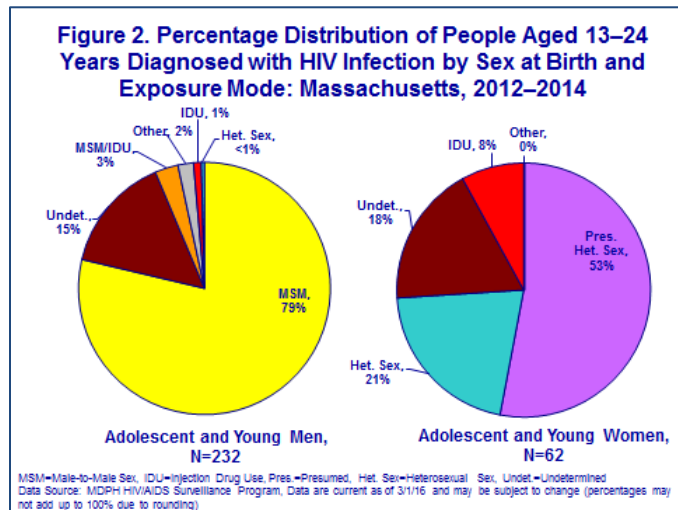
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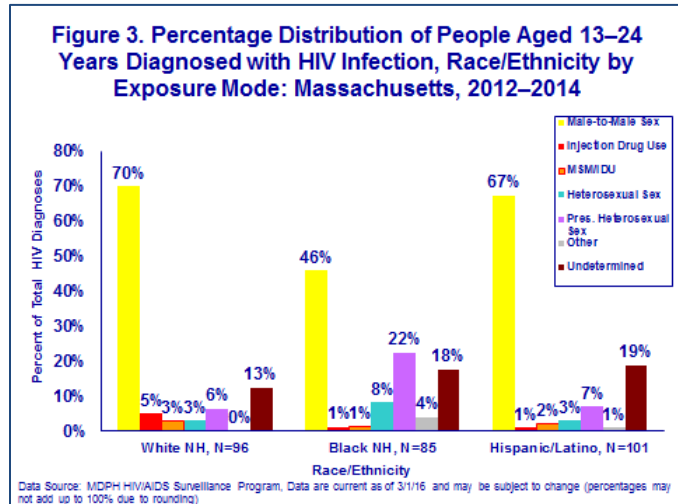
Exposure Mode and Sex at Birth:

- A higher percentage of young women recently diagnosed with HIV infection reported injection drug use, compared to young men (Figure 2).



Exposure Mode and Race/Ethnicity:

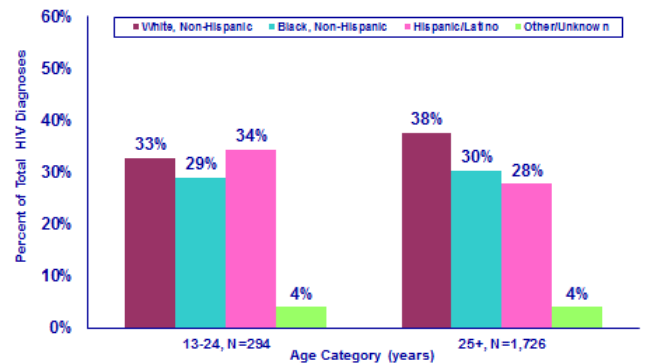
- Injection drug use exposure accounted for 5% of recent diagnoses among white (non-Hispanic) youth aged 13-24 years, 1% among black (non-Hispanic) youth and 1% of Hispanic/Latino youth (Figure 3).



Race and Ethnicity, Age Comparison:

- The racial/ethnic distribution of adolescents and young adults recently diagnosed with HIV infection was similar to that of people diagnosed at age 25 years or older (Figure 4).

Figure 4. Percentage Distribution of People Diagnosed with HIV Infection by Age at HIV Diagnosis and Race/Ethnicity: Massachusetts, 2012–2014

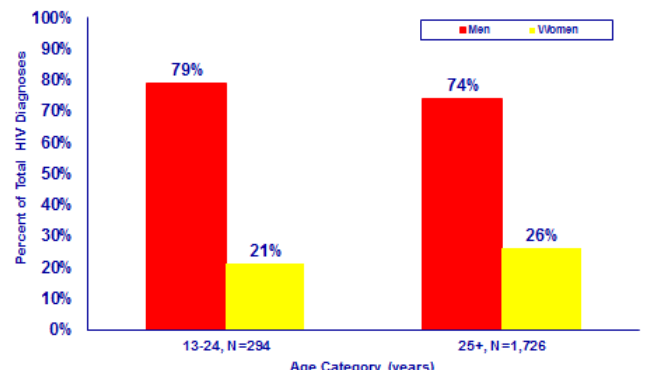


- Among youth living with HIV infection who were 13 to 24 years of age on December 31, 2015, 42% (N=156/374) were black (non-Hispanic), and 34% (N=129/374) were Hispanic/Latino.
- Among people aged 25 years or older living with HIV infection, 30% (N=5,911/19,874) were black (non-Hispanic) and 24% (N=4,896/19,874) were Hispanic/Latino.

Sex at Birth, Age Comparison:

- Men are the majority of individuals recently diagnosed with HIV infection for both age groups (Figure 5).

Figure 5. Percentage Distribution of People Diagnosed with HIV Infection by Age at HIV Diagnosis and Sex at Birth: Massachusetts, 2012–2014



Regional Distribution:

- The Western Health Service Region (HSR)^v had the highest percentage of adolescents and young adults recently diagnosed with HIV infection (22%; N=53/241).

Among cities with at least 5 people recently diagnosed with HIV infection at ages 13–24 years, the following had the largest proportions of adolescents and young adults (N=number of HIV infection diagnoses at ages 13–24 years):

City	N	%
Holyoke	8	33%
Lynn	10	20%
Revere	5	19%
Springfield	25	18%
Fall River	5	16%
Boston	85	16%
All others	156	13%
Massachusetts	294	15%

- The City of Boston had the largest number of adolescents and young adults recently diagnosed with HIV infection (N=85), accounting for 29% of all HIV diagnoses made in this age group in Massachusetts.

Adolescents at Risk of HIV Infection

Behavioral Risk Factors: According to the Massachusetts Youth Risk Behavior Survey (MYRBS), many high school-aged adolescents report engaging in behaviors that may place them at risk for HIV infection.

- In 2013:
 - 38% of 2,516 respondents reported ever having sexual intercourse,
 - 58% of 679 respondents reported condom use at last intercourse,
 - 3% of 2,506 respondents reported sexual intercourse before age 13,
 - 9% of 2,508 respondents reported four or more lifetime sexual partners,
 - 28% of 2,510 respondents reported sexual intercourse in the past three months,
 - 24% of 679 respondents reported alcohol or drug use at last intercourse,
 - 3% of 2,638 respondents reported ever being or getting someone pregnant, and
 - 9% of 2,679 respondents reported ever having sexual contact against their will.

- Both injection and non-injection substance use have been documented to increase risk for HIV infection and hepatitis C. Among 2,718 respondents to the 2013 MYRBS, 4% reported ever using cocaine, 1% reported ever using heroin and 1% reported ever using a needle to inject drugs.^{vi}
- Compared to 2003, there has been little change in the proportion of respondents reporting risk behaviors.

Data Source:

HIV/AIDS Case Data: MDPH HIV/AIDS Surveillance Program, Data are current as of 3/1/16 and may be subject to change

ⁱ Please note “women” and “men” are used for stylistic reasons to describe female and male populations diagnosed with HIV infection that include a small number of girls and boys (N=24 children living with HIV infection under age 13 as of 12/31/15). Data reflect sex at birth and therefore not gender identity or gender expression of transgender individuals (N=56 transgender individuals living with HIV infection).

ⁱⁱ Effective January 1, 2011, the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

ⁱⁱⁱ Centers for Disease Control and Prevention. HIV Surveillance Report, 2014; vol. 26. <http://www.cdc.gov/hiv/library/reports/surveillance/>. Published November 2015. Accessed [6/30/16].

^{iv} Percentages may not add up to 100% due to rounding

^v Reflects the health service region of a person’s residence at the time of report (not necessarily current residence). HSRs are regions defined geographically to facilitate targeted health service planning. See Epidemiologic Profile General Appendices, Health Service Region Maps, available at <http://www.mass.gov/eohhs/docs/dph/aids/2006-profiles/app-hrs-maps.pdf>.

^{vi} 2013 behavioral risk data are from the 2013 Massachusetts Youth Risk Behavior Survey, for more information see: Massachusetts Department of Elementary and Secondary Education, Massachusetts Department of Public Health. *Health and Risk Behaviors of Massachusetts Youth 2013*. May 2014, <http://www.doe.mass.edu/cnp/hprograms/yrbs/2013report.pdf>